

Atty. Docket No. CQ10037  
**PATENT APPLICATION**

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No. 09/401,574

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (Currently amended) A method of determining the location of a feature in an image projection system, the method comprising:

- 1) projecting a first image of the feature onto a detector with a lens in a first position;
- 2) sensing, with the detector, the position of the first image of the feature;
- 3) projecting a second image of the feature onto a detector with ~~[[a]]~~ the lens in a second position laterally spaced from the first position;
- 4) sensing, with the detector, the position of the second image of the feature; and
- 5) deducing the location of the feature from the difference between the positions sensed in steps 2) and 4).

2. (Original) A method according to claim 1, wherein the detector comprises an array of detector elements, and wherein the positions are sensed in steps 2) and 4) in accordance with the position of the image of the feature on the array.

3. (Currently Amended) A method according to claim 1, ~~wherein the images of the feature are projected in steps 1) and 3) using the same lens, and~~ wherein the method further comprises moving the lens between the first and second positions.

Atty. Docket No. CQ10037  
**PATENT APPLICATION**

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No. 09/401,574

4. (Original) A method according to claim 1, wherein the images of the feature are projected onto the same detector in steps 1) and 3).

5. (Original) A method according to claim 4, further comprising moving the detector between steps 1) and 3).

6. (Original) A method according to claim 1, further comprising

6) outputting an indication of the location of the feature in accordance with the deduction in step 5).

7. (Currently Amended) A method of generating an electronic representation of an input image, the method comprising

a) projecting the input image onto a detector with a projection system whereby the detector generates the electronic representation of the input image;

b) determining the location of a feature in the projection system by a method according to ~~any of the preceding claims~~ claim 1; and

c) correcting the electronic representation of the input image in accordance with the location of the feature determined in step b).

8. (Original) A method according to claim 7, wherein the input image is projected onto the detector by illuminating a substrate carrying an original image and directing radiation from the illuminated substrate onto the detector.

9. (Original) A method according to claim 8, wherein the electronic representation of the input image is corrected in step c) by assigning the feature to an optical component in

Atty. Docket No. CQ10037  
**PATENT APPLICATION**

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No. 09/401,574

accordance with the location determined in step b); and correcting the electronic representation of the input image signal in accordance with which optical component has been assigned with the feature.

10. (Original) A method according to claim 7, further comprising causing relative scanning movement between the detector and the input image.

11. (Currently amended) Apparatus for determining the location of a feature in an image projection system, the apparatus comprising a detector; ~~one or more lenses~~ a lens for projecting a first image of the feature onto the detector, the lens being laterally moveable to a and second position for projecting a second image of the feature onto a detector; images of the feature onto the detector from laterally spaced positions; a system for sensing the positions of the first and second images of the feature; and a system for deducing the location of the feature from the difference between the positions of the first and second images.

12. (Original) Apparatus for generating an electronic representation of an input image, the apparatus comprising

a) a projection system for projecting the input image onto a detector whereby the detector generates the electronic representation of the input image;

b) apparatus according to claim 11 for determining the location of a feature in the projection system; and

c) a system for correcting the electronic representation of the input image in accordance with the location of the feature.

Atty. Docket No. CQ10037  
**PATENT APPLICATION**

AMENDMENT UNDER 37 C.F.R. § 1.111  
U.S. Application No. 09/401,574

13. (Original) Apparatus according to claim 12, wherein the projection system comprises a radiation source for illuminating a substrate carrying an original image, and means for directing radiation from the illuminated substrate onto the detector.

14. (Original) Apparatus according to claim 12, further comprising a system for generating relative scanning movement between the detector and the input image.

15. (New) A method according to claim 1, wherein the feature comprises an optical component defect.

16. (New) Apparatus according to claim 11, wherein the feature comprises an optical component defect.